



PATENT ABSTRACTS OF JAPAN

(11) Publication number: **2002170480 A**(43) Date of publication of application: **14.06.2002**(51) Int. Cl **H01J 1/304**

H01J 9/02, H01J 29/04, H01J 31/12

(21) Application number: **2000362395**(22) Date of filing: **29.11.2000**(71) Applicant: **NEC CORP**

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(54) **FIELD EMISSION COLD CATHODE, ITS
 MANUFACTURING METHOD AND FLAT
 PICTURE DISPLAY DEVICE**

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a field emission cold cathode which has strong adhesion between a substrate and a CNT(carbon nano tube) layer, and can obtain superior emission characteristics with high uniformity and stability, even though a CNT layer is used.

SOLUTION: This field emission cold cathode comprises an emitter layer 1b which includes a plurality of CNT formed on a glass substrate 6, then, the emit-

ter 1b emits electron from its surface when a specified voltage is applied on it. Here, the emitter 1b has alternately laminated structure of binder layers 3a (and 3b) and CNT layers 4a (and 4b) which include CNT bound with the binder layers.

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